Vol. I. APRIL, 1929 No. 4

# Agricultural Education

Supervised Practice Number

0



Champion carload of baby beef calves produced by Vocational Agriculture boys, Clark County High School, Winchester, Kentucky

"To put thought into our work and work into our thought; to idealize existence and preserve these ideals in everyday life—this, too, is culture."
—Eugene Davenport.

# FORIAL

### AGRICULTURAL EDUCATION

A monthly magazine, managed by an editorial board chosen by the Agricultural Section of the American Vocational Association and published at cost by the Meredith Publishing Company, Des Moines, Iowa.

Special Editors

Editing-Managing Board

Paul W. Chapman, Georgia: James R. Coxen, Hawaii; R. W. Gregory, Indiana; H. M. Ham lin, Iowa; R. W. Heim, Delaware; F. E. Moore, Iowa; J. H. Pearson, Nebraska; H. M. Skid-more, California; Z. M. Smith, Indiana; W. F. Stewart, Obio.

Subscription price 31 per year, payable at the office of Meredith Publishing Company. Des Moines, Iowa, or, to Z. M. Smith. Secretary. Treasurer, at 202 Sylvia St., West Lafayette, Indiana. All subscriptions begin January 1. To aid in the collection of subscriptions, it is urged that, where possible, subscriptions be sent in by states, rather than individuals. Editorial matter is received by H. M. Hamlin, es; Russell Ave. Ames, Iowa. No advertising is accepted.

Entered as second class matter, under act of Congress, March 3, 1879, at the post office, Des Moines, Iowa.

Vol. I

APRIL 1929

No. 4

### SUPERVISED PRACTICE-A GROW-ING CONCEPT

PROBABLY nothing has changed more in agricultural education during the past dozen years than our notions as to what constitutes a supervised practice program.

Initially we thought of it as comprising only a project of play proportions carried for six months to satisfy a federal requirement. But the thing began to grow on us. For years we debated the matter of scope and we became pretty generally convinced that projects should be large enough to demand the use of commercial methods. Later we expanded the concept in time, first getting the idea that the project should run thru a yearly cycle, then gradually lengthening its duration until now we say that ideally projects once started never stop.

In due course of time, too, we became convinced that projects in themselves, however well managed, do not provide for all of the experience which is bound up in the term "supervised practice." Stimson, the father of the project idea, was probably the first to see this and he introduced in Massachusetts what has later come to be called an "activity sheet," which he used to encourage a broad training for every boy in all of the practical phases of farming. The idea of supplementary farm practice had come into being. Now this is generally provided for, in one or another form.

Still later, we began to talk about training for group activities in agriculture. Gradually we began hearing from all parts of the country of class projects. These, too, are now evidently with us to HAWAIIAN REPRESENTATIVE



James R. Coxen

N our editorial board is J. R. Coxen, Director of Vocational Education for the Territory of Hawaii, with headquarters at Honolulu. Every teacher of vocational agriculture in the islands is a subscriber to Agricultural Education.

stay and a variety of practical adaptations of them have been worked out. We are fast reaching the point where we are willing to assume the responsibility of training farmers for cooperative activity and it is abhorrent to us to attempt to teach anything without practice in a natural setting, hence we are likely to see extensive development in the next few years of projects for practicing cooperation.

This new idea has wrought a change likewise in our methods of estimating the results of school instruction. When we began to get results outside of school, in connection with our practice program, we naturally began to take account of them and measure them. Then some of us began to question whether it is not outside of school that the results of school instruction ought, after all, to be measured. Surely the school does not exist as an end in itself, but rather as a means of bringing about out-of-school changes. Perhaps the method of measuring results developed in connection with our supervised practice programs will furnish the pattern for the measurement of all educational endeavors.

Supervised practice, required in connection with our work, has led us into the homes. At first we didn't know what to do in this new relationship. But we gradually worked out a technique and we began to get results of a type that other teachers, working in isolation from the homes, could not duplicate. Now many leaders in education are seeing home education as fundamental and the school as supplementary and corrective and they argue from this viewpoint for the necessity for school-home cooperation if real education is to take place.

The supervised practice requirement made it necessary for us to attempt to teach during the summer months with no school in session. It was a baffling problem and many failed to solve it. But some have been able to make the summer months the most productive teaching season of the year.

The growth of the concept of supervised practice has not been confined to agriculture. School men in various fields

are seeing its importance and we are beginning to encounter situations where Health, Citizenship, English and other school subjects have their accompanying provisions for out-of-school practice.

All this has happened to us in twelve years as we have blunderingly tried to carry out the provision of the Federal Vocational Education Act that there must be "at least six months of supervised practice." What further meaning shall we weave into this term in the years to come?

#### THE AMATEUR WRITER By PAUL W. CHAPMAN

#### AN EDITOR'S SUGGESTION

"My first suggestion to our contributors would be to forget that they 'can't write' and then go to it. The best contributions that we get are from people who in the first place have stories to tell, and who in the second place 'can't write.' Knowing that they can't write, they content themselves with telling the story 'just as it happened.' And when they do that they work in those little intimacies that do so much to lend interest and charm-

WHAT are the requirements of a good news article of the type that must prevail in a publication such as Agricultural Education if it is to be widely read?

1. It must contain facts. Facts are the first essential. Without them a writer has "nothing to say."

2. It must be accurate. The editor should not have to verify any of the statements.

3. It must be concise. This does not mean brief. It means saving a lot in a few words

4. It must be timely.

5. It must be written in a simple style and contain only such words as are easily comprehended by the average reader.

6. It must be conservative. This means that few ideas represent panaceas for all ills.

7. It should be written in such a way that an element of human interest is injected. It must give insight into human, as well as technical problems.

# ATTENTION!

### Teacher-Trainers

Many of your older students are now arranging for their positions for next year. Soon they will be leaving you. You would like to have them keep informed as te movements in agricultural education. Why not urge them to subscribe now for this magazine?

Probably many of your other students would like to subscribe. Have they had the opportunity to learn about the magagine?

The subscription price from April 1 to January 1 is 75 cents.

# Standards In Supervised Practice

A Portion of an Address Delivered Before the Agricultural Section of the American Vocational Association, at Philadelphia, December 15, 1928

By R. D. MALTBY

Agent in Agricultural Education, Southern Region, Federal Board for Vocational Education

BOUT six months ago the agricul-tural agents of the Federal Board in Washington drew up what was finally termed "Some Characteristics of a Desirable Program of Supervised Practice Work." This program consists of twelve items. I have looked upon these twelve items rather seriously because, not only do they represent the best thought of the agents, but they also reflect the opinions of the supervisors and teacher trainers thruout the country.

Let us consider these twelve items for the purpose of setting up some standards for a super-

vised practice program. "A supervised practice program should include one or more major enterprises continued and developed thruout the time the boy is

in school."

In my opinion, there has been entirely too much jumping from one point to another in the realm of vocational agricultural education. Boys have been taking projects, but these projects have not necessarily been related to each other, neither have they been selected on the basis of a farmer training program. Our selection of projects, or rather, our approval of the projects selected, has not been based upon a single objective. There has been a decided absence of continuity running thruout the supervised practice program. If I am correct in my interpretation of the trend of the present thinking of the men in vo-cational agriculture, I be-

lieve that they are now moving toward a system that will fit the boy for a definite type of farming. If my interpreta-tion is true, it would seem logical that our supervised practice program should provide for a project or series of projects that will grow and develop into a system

of farming.

There are many reasons why we believe that a project in a major enterprise continued successively thru three or four years is pedagogically correct, but let it suffice to say that such a project is necessary if we are going to reach our objective for the vocational agricultural

### Minor Cash Enterprises

If we adhere to the standard indicated under item one, it frequently happens that the major enterprise during the first year represents only a start and that the income from such a project can be accounted for only thru increased inventorial value. I am thinking of such a project as dairying, in which a boy starts with one or two calves, or a project in fruit that deals with the setting out of an orchard. It would be quite natural, in any system of farming, to supplement these enterprises with others that will bring in an income temporarily to tide over the period of non-productivity of the major enterprise. This arrangement also provides opportunities for diversification in farming and for a cash income during periods of the year when the major enterprise may be dormant.

### Related Enterprises and Jobs

Illustrations are the growing of feed for livestock, companion crops, and soil improvement crops. Then, too, there are should be large enough to require the efficient use of regular farm equipment.

Many of the projects carried on by our vocational boys have been so small that the use of regular farm equipment was out of the question. The pupil's records on such work have had little value in indicating costs and returns when considering a normal situation on the farm. Two major difficulties develop as the result of small scope projects. First, the records and reports are inaccurate and unreliable, and second, the

pupil acquires very little experience in the use of farm machinery as it relates to normal production. A project of small scope permits of but one objective, that of quality of product. The factors of cost, time, labor and the efficient use of machinery must be disregarded. A few states have attempted to set up a minimum size of projects allowed, tho I do not believe that such standards were based on the pedagogy of vocational edu-cation. To my knowledge, most of them were selected on the basis of the probable earning capacity of the pupil and a financial goal that was desired to be reached. I believe that more work and thought should be put upon this item in order that some standards might be set up for the guidance of our program.

Item six deals with the scope of the supervised practice program in relation to efficiency of training on the part of the pupil. If our

responsibility in vocational education is to increase the ability of the boy to think and work skillfully, then we must provide an opportunity for him to secure repetitive training, under the super-vision of the agricultural teacher, in the several jobs which he performs. Skill comes only from performing the same job a number of times and the degree of skill we desire depends upon the opportunity that we give the boy to secure this experience. I, for one, am not in a position to say how many cows a boy should feed in order to become skillful in feeding cows. I am satisfied, however, that one cow is not enough, and I am absolutely sure that but little experience in feeding dairy cows can be obtained from the care of one calf.

Consider Boy's Previous Training

I believe, therefore, that the standards that should be set by our agricultural teachers in regard to this item should be based somewhat upon the pupil's previous experience and ability and that the standard should be set for each individual boy, rather than for a class or a state.

Item seven deals with the performance

### Some Characteristics of a Desirable Program of Supervised Practice

1. A supervised practice program should include one or more major enterprises continued and developed thruout the time the boy is in school.

There should be minor cash enterprises.

There should be related and contributory enterprises and jobs. Other important farm jobs not included above, including farm shop and engineering jobs, should be involved.

The supervised practice program should be large enough to require the efficient use of regular farm equipment.

The scope should be sufficient to provide adequate training

- to develop proficiency in the type of farming for which the pupil is training.
- 7. The work in connection with the supervised practice program should be performed very largely by the boy himself. The boy should assume financial responsibility for carrying
- on the program.
- 9. There should be carefully prepared plans in writing. 10. Accurate records should be kept as to:
- a. Money transactions;

  - b. Labor and power used;c. Materials and supplies;
  - d. Important activities and events.
- 11. There should be careful interpretation of all records and
- 12. A new plan should be set up for the ensuing year, based on the interpretation of the previous year's work

many farm jobs that the boy should be-come skillful in performing, such as pruning, culling, and testing seeds. No program of supervised practice, it seems to me, would be complete without including such jobs

#### Farm Shop and Engineering Jobs

Our next item deals with farm jobs not included in any of the above, such as farm shop, and engineering jobs. I am inclined to feel that our farm shop programs in the several states have been confined entirely too closely to the school shop. It is true that many farm appliances are constructed in the school shop and taken home, but in the school shop the boy has tools, equipment and super-vision which he normally would not have at home. There is almost as much reason why the participation program in farm shop work should be planned for the home as there is for a participation plan at the farm home for the more general agricultural subjects. I am also inclined to believe that if the students were required to do more of this work at home, a better reaction would be obtained from the parents.

"The supervised practice program

of the work by the boy himself. It refers to his thinking as well as to the actual performance of the manual operations. How many times have we gone out to visit projects and had the father tell us what the project was all about, how they selected the seed, and what fertilizers they used and why! In many cases about the only thing I have been able to find that the boy himself performed has been the record keeping on the project, and this often very poorly. The thinking was done either by the agricultural teacher or by the father; the work was performed by the father and mother, sometimes assisted by the boy. The boy re-corded in his project book those items he was able to get from those who did the work. Too many teachers are running the projects. The teacher is not the director of this work, but he is the referee or umpire, if you please, trying to keep the boy from going wrong, assisting him when he is down, and keeping him on the right road; but the actual thinking and planning should be the boy's own efforts

I find quite a divergence of opinion as to the desirability of having the boy perform all of the manual labor himself. Personally, I still believe that we should require the boys to do a major part of the manual labor. It is thru these contacts and thru these performances that he is better able to pass upon the fitness and efficiency of his farming plans.

Financial Responsibility

Item eight deals with the financial responsibility on the part of the boy. More and more we are coming to realize that when the boy has been made to understand that he is responsible for the money invested in the project, he takes a much more lively interest in his work. If his name is on the note at the bank rather than his father's, if he is made to understand that if he loses on his project he must earn the money in some way and pay it back, he is going to see to it that his plans are more carefully laid and his work is more carefully planned. Without financial responsibility there can be no ownership, even the ownership is affirmed by the parents.

#### Written Plans

Item nine states that there should be carefully prepared plans in writing of the supervised practice program the pupil expects to put into operation. I am prepared to say that there are practically no project plans being prepared by our students in vocational agriculture. There are a few statements of jobs that are to be performed; there are a few objectives set up; there are a few general statements as to procedure; but there are no real plans. Some states have gone further along this line than others, but there are few business plans set up. I realize that I am stepping on dangerous ground but I am going to make the following statement:

Project plans should include a definite statement as to the objectives; a definite statement as to the financial arrangements; a definite statement as to the equipment that is to be used, whether this equipment is on hand, has to be purchased or hired; a definite statement relative to estimated returns and costs of the project; a very careful analysis of the managerial decisions that are made; and a definite statement of the operations that are to be performed and the practices that are to be followed,

whether or not such practices are based upon that which is common for the community or upon experimental data. These things should all be in writing. If it is necessary for the professor of chemistry to require a notebook of his pupils in order that he may determine whether they have performed their work properly and understand what they are doing, then it is vastly more important that the agricultural teacher require project plans in order that he may check the thinking of his pupils, assist them when they are wrong, and grade them according to their abilities. Other items might be placed in the project plans but I believe that the above-mentioned are absolutely necessary

#### Records and Accounts

There is very little excuse for inadequacy in records and yet it is nearly universal. Of the project record books I have reviewed within the last two years, I have as yet failed to find one I considered accurate. Errors in arithmetic are entirely too frequent. There is incompleteness as to costs and labor ex-

THINK THESE OVER

"There are practically no project plans being prepared by our students in vocational agriculture."

"Of the project record books I have reviewed within the last two years, I have as yet failed to find one I considered accurate."

"The boys in our agricultural classes must be trained to think straight, and when they think straight, they are going to think right."

"Our supervised practice program should provide for a project or a series of projects that will grow and develop into a system of farming."

"I believe it is pedagogically criminal to allow the boy to believe that he has made \$40 or \$50 per acre on his project when he probably has only made \$5 or \$10 per acre."

-B. D. Maltby.

pense. Often there is wide divergence between yields and sales. I would not mind a 5 or 10 percent error, but when errors get up to 300 or 400 or even 1000 percent there is certainly something wrong. I believe it is pedagogically criminal to allow the boy to believe that he has made \$40 or \$50 per acre on his project when he probably has only made \$5 or \$10 per acre, and yet this frequently happens. I wish that space would permit me to give you an analysis of some of the records that I have reviewed within the last two or three years, but I am satisfied that we are all aware of the fact that we must set a much higher standard for accuracy in connection with our record keeping, if we are going to require records at all.

#### Using the Records

Item eleven deals with the careful interpretation of all the records. I once heard a farmer say that he kept records on his farm last year and he did not make any more money than he made the year before. Records are of no value in themselves. We only require these records for the information they possess that will help us in our future efforts.

Item twelve involves the continuation

of the plan based upon the interpretation of records. I believe that the agricultural teacher has here a great opportunity that he has not realized in having his pupils analyze thoroly the records have kept on their project work and use such analyses in making their plans for future activities. I believe that if we can obtain a higher standard for our supervised practice work, if we will pay more attention to the pupil's choice of the project he is going to pursue, if we insist that he prepare a very careful plan for his work, that he keep his records accurately and completely, that he analyze, summarize and interpret these records in terms of the mistakes he has made in the past, and on their basis draw his conclusions for his future work, we in the supervising and teacher training fields will not need to be so much concerned about the methods used by our agricultural teachers in putting across their jobs.

I am today just as firm a believer as I was ten years ago that the course of study should be based upon the supervised practice program of the pupil, and that the supervised practice program of the pupil should be based upon the type of farming common to the community in which the school is placed.

Our first obligation in our training courses is to so train these boys that they may be efficient farmers. I am concerned with the development of communities but I believe that community development is a by-product of vocational agricultural education, resulting from the efficient work that the pupils in our classes are doing. Too many agricultural teachers in the United States today are directly concerned with getting a new variety in their community, getting a new breed established, or a creamery started. I believe that these things should come about in a community as the result of education and not as a result of direct appeal. The boys in our agricultural classes must be trained to think straight, and if they think straight, they are going to think right. Our farmers in our evening classes must be raught to deal with the facts that pertain to their work and not just guess at the situation as they have been doing. I believe that a change in farm practice as a result of education is a permanent thing, whereas practices that have been changed thru the influence of the agricultural teacher because of his personality and leadership and enthusiasm do not always persist.

Summing up then, my appeal to the vocational agricultural workers is: Set a standard of performance for our agricultural pupils both in terms of their ability to think and their ability to perform; secondly, set a higher standard for our participation program.

Albert M. Shaw, agricultural teacher, Hollenbeck Junior High school, has recently been elected to the presidency of the Los Angeles High School Teachers' Association. It is interesting to note that his only competitor in the election campaign was another agriculture teacher in the Los Angeles school system. The fact that these two were the only candidates for the presidency of an organization with some 3,000 members is very significant. It shows that the old academic type of teacher is commencing to recognize the high quality of our agricultural group.—California News Letter.

# The Earning of Vocational Pupils

DR. F. W. LATHROP, University of Minnesota

NE of the criteria by which vocational agriculture is measured is the present earning capacity of vocational pupils. This criterion is objective, makes a powerful appeal to many persons and is legitimate provided the existence of other criteria is recognized. The results of this study seem to have two values: first, the earning is shown, and second, some standards are proposed according to which we may measure pupil earning.

Financial reports on pupil earning from schools in twenty states furnish the source of information. After the elimination of some reports and of some earning activities in remaining reports. there are 1,066 earning activities (projects) in 87 schools. Earning activities were omitted for three causes: (1) inaccurate accounting discovered when the records were checked, (2) insignificance of pupil labor compared to other labor, and (3) profit per hour so high as to show an abnormal situation. The remaining activities are reported accurately, seem to have been under pupil control judged by the amount of pupil labor and seem to have been conducted under normal conditions judged by the profit per hour of labor. The returns from the activities vary widely. An examination of the cost account records of adult farming indicates an equally wide variation.

The twenty states from which the reports come represent all sections of the country. With the exception of four states the schools reporting were a random selection within the states. The data of the study afford a fair sampling of pupil earning.

TABLE I The Median Project

- 1. Required 80.4 hours of pupil labor. 2. Required 113.7 hours of total labor.
- 3. Made a profit of \$46.13.
- 4. Made a profit of 40.8 cents per hour

Four important figures are shown in Table I. Other figures and the discussions are contributory to these.

These four figures are medians rather than averages. The projects were arranged numerically four times, once according to hours of total labor, once according to profit and once according to profit per hour of labor. The four medians were found from these arrange-

The measure of size of project which allows a comparison of different kinds of projects is the number of hours of pupil labor. The median project required

about eight 10-hour days of work.

In some projects, labor in addition to pupil labor is found. Adding other labor to pupil labor gives us total labor. This figure shows the full size of the project with which the pupil has been connected and has presumably managed. The amount of total labor indicates the size of the project from the managerial standpoint. When the projects were arranged in the order of amount of total labor, the median project required 113.7 hours of total labor.

The median project made a profit of \$46.13. The data blank calls for such items as are usually found in farm cost accounts. The profit thus found is comparable with profits derived from farm management studies if the projects and enterprises extend over the same period of time. Of the 1,066 projects, 59 were carried at a loss. The average profit per school is \$1,151.79. The profits from projects eliminated would raise this average somewhat.

The profit per hour of labor is used to indicate the efficiency of pupil earning. The profit is divided by the total hours of labor rather than by the pupil hours. Thus the profit per hour of a project becomes comparable with the profit per hour of other projects and adult enterprises. Arranged according to profit per hour the median project made a profit of 40.8 cents per hour.

There is a need for standards by which we can evaluate pupil earning. The four medians afford such standards. Their value is that they are based on a study of existing conditions. To meet the objection that the medians are not high enough to use as a standard, it is suggested that the 75 percentiles may be so

used. These are given in Table II.

To show how the four medians may be used as standards, the pupil earning summaries of Schools 36 and 82 are

Table III shows the summary of the pupil earning of School 36 for 1926-1927. The pupil hours range from 12 to 163. median 45. The size of earning activities is below the standard. In this school the other labor is very small and is not shown. The profit ranges from -\$7 to \$318.54, median \$47.50; the profit per hour from —\$.051 to \$3.524, median \$0.875. The effectiveness of pupil earning is above the standard. Note that one project is conducted at a loss

Table IV summarizes the pupil earning of School 82. The pupil hours range from 137 to 387, median 265. The other labor is small and so pupil hours and total hours are practically the same. The profit ranges from \$8 to \$541.11, median \$45. The profit per hour ranges from \$0.025 to \$2.065, median \$0.275. The effectiveness of pupil earning is below the standard.

So we might take the pupil earning of each school and compare it with these four medians.

Medians and averages were found for each enterprise but these will not be presented at this time. The number of projects in some of the enterprises was less than 100 and this together with the fact they were scattered thru many states and represent only one season makes such medians and averages of questionable value. In some of the enterprises of greater frequency the medians are very close to those of the whole

#### (Continued on page 6)

#### TABLE'II The 75 Percentile Project

- 1. Required 149.8 hours of pupil labor

- Required 227.6 hours of total labor.
   Made a profit of \$104.
   Made a profit of 86.8 cents per hour

		. TA	BLE I	II		
		Scho	ol No.	36		
		Pupil	Pupil Total		Profit	
		Scope	Hours	Hours	Profit	per Hour
1	5	A. of corn	124	124	\$28.05	\$ .226
2	5	A. of corn	75	75	64.18	.855
3	5	A. of corn	70	70	63.93	.913
4	8	A. of corn	135	137	-7.00	051
5	5	A. of corn	163	163	52.46	.321
6	15	A. of barley	. 33	55	19.37	.352
7	180	Broilers	40	40	60.03	1.500
8	12	Shoats	29.5	50	94.39	1.881
9	8	Shoats	8.1	8.1	16.93	2.077
10	500	Chickens	. 60	60	52.55	.875
11	1	Sow litter	. 50	50	176.22	3.524
12	2	Sow litters	. 56	56	131.15	2.349
. 13	1	Sow litter	. 56	56	109.36	1.952
14	2	.5 A. of corn	. 72	72	16.95	.236
15	430	Chickens	. 144	144	318.54	2.219
16	5	A. of corn	. 26	37	10.45	.282
17	21	Capons	. 12	12	6.48	.540
18	3	Sows and litters	. 34.5	34.5	13.45	.389
Medians			. 45	47.5	47.50	.875

			Scho	ol No.	82		
Pupi	1			Pupil	Total		Profit
Numb	er	Scope		Hours	Hours	Profit	per Hou
1	3	A. of	maize	. 278	278	\$541.11	\$2.06
2	36	Hens		. 154	154	30.80	.20
3	2	Gilts		. 130	130	45.34	.34
4	40	A. of	maize	. 313	313	234.90	.75
5	20	Hens		. 223	223	13.55	.06
6	28	Hens		. 188	188	10.38	.05
7	2	Sows		. 273	273	106.63	.03
8	4	Pigs		. 310	310	8.00	.02
9	29	Hens		. 276	276	11.25	.04
10	2	Gilts		. 267	267	27.25	.10
11	3	Gilts		. 350	350	296.77	.84
12	30	A. of	maire	. 387	487	39.95	.08
13	30	A. of	maize	. 296	296	89.25	.30
14	500	Chick	kens	. 178	178	49.35	.27
15	2	Sows		. 281	281	93.15	.33
Me	dian	8		. 265	265	45.00	.27
-							

This study was made as a part of the program of the Committee on Research and Measurement of the Agricultural Section, American Vocational Associ-

# A Group Enterprise Plan For Farm Practice

By F. G. BURD, Supervisor Vocational Agriculture, Frankfort, Kentucky

VERY large part of the world's work is done by groups of people working together. The work of the U.S. Congress is a group enterprise. Wars are won thru group effort. Henry Ford is conducting a group enterprise. Building a bridge, operating a chain of stores, conducting the business of a church or school are group enterprises. In agriculture, the livestock market, tobacco market, cooperative buying and selling associations, silo filling, hog killing, barn raising, wheat thrashing, are typical group enterprises.

So the group plan is neither new nor untried. On the contrary it is the normal and successful way that people have for doing their work.

Since such a large part of what people do is done by group action it would seem that the schools should train pupils by having them act in the normal way. This plan of learning to do by doing lends itself especially well to the farm practice work in vocational agriculture.

Under the present program for farm practice work in Kentucky, each boy taking vocational agriculture is encouraged to conduct practice work with several enterprises making up a farm practice program. For example, if the boy plans to feed hogs for his major work, he is encouraged to fit the hogs for the market. No boy is considered to have a complete farm practice program who is conducting a single enterprise.

Farming in Kentucky is diversified, and for that reason, the vocational program in order to approximate actual farming must be diversified too.

The group enterprise plan that is used by vocational teachers provides a sort of organization for any group of boys who are interested in the same enterprise. Any major enterprise in a community as tobacco, hogs, sheep, beef cattle may be selected for a group activity. The boys, aided by their teacher and parents, select the enterprises that they want for their farm practice program. Considerable study is made to determine the scope and profitableness of the various farm enterprises in the region of the school before the boys de-

cide what their practice programs shall be. Once the boys have decided what they want they are then ready for the group organization. In other words, the boys are organized in the name of their major enterprise. For example, one vocational department may have several group enterprises going at the same time, namely a group of tobacco grow-ers, sheep raisers, hog feeders, corn growers, baby beef feeders, etc. The boys in each group augment their major enterprise with contributory and minor enterprises, and by so doing pattern their farm practice work after the adult farmers in the home community.

This brings us to the question that naturally arises—"What are the advantages of having boys work in groups? For six years some of the vocational agricultural boys in Kentucky have been making use of the group plan in their baby beef cattle feeding program. They have found the plan practical and usable. The cover page photograph shows the champion carload of baby beef exhib-ited at the past November show and sale in Louisville. This load, together with two other loads, was fed and fitted for show by the Clark County High School, Winchester, Kentucky. Sheep, dairy cattle, hogs, chickens, tobacco, alfalfa and corn are being used for group enterprises in Kentucky.

Listed below are statements made by teachers who have tried the group plan for feeding baby beef.

1. The boys have learned by experience what constitutes a good feeding animal

2. The boys have learned to work out and mix balanced rations.

3. Valuable lessons in cooperative buying and selling have been learned.

4. The boys have become better

acquainted with the local banks in a business way. 5. The boys have learned to do busi-

ness for themselves and to take advice from others about business matters 6. Community spirit has been kindled

and community pride aroused.

7. Much advertising for the community has been done.

8. Valuable trips for specific study have been made

9. Teamwork has been engendered. 10. Keen competition at the shows has taught good sportsmanship to the

11. They have learned how to exhibit

beef cattle to advantage.
12. They have learned to keep records accurately

13. The teacher has made better contacts in the homes as result of group enterprises.

14. The teacher has been stimulated to do his best

15. The pupils and teacher have made many acquaintances in a business way, that they could not have made without the group enterprise.

16. The high school boys are interested and determined to make a better showing next year than they have in the

17. The public press is glad to publish the stories.

18. The group plan fits well into the preparation for school and community fairs as well as the state fair.

19. The plan has a selling advantage in that high school boys naturally like to do the things that sound big (as help produce a carload of lambs, baby beef

calves, potatoes, apples, etc.)
20. The plan gives the teacher freedom to direct and supervise the practice

21. Parents cooperate splendidly and pupils finish their practice work in superior fashion.

22. Boards of education and the entire community give support to the work.

23. Business men contribute financially and otherwise to the work.

24. Pupil demands of teacher and

supervisor are increased. 25. The plan motivates in the class-

room as well as in the field. 26. Adult farmers are convinced thru

observation that it pays to feed balanced rations.

27. It has paved the way for short course work in feeding cattle for farmers.

### The Earning of Vocational Pupils (Continued from page 5)

For example, the median for pupil hours in 170 corn projects is 76.1. for total hours, 135; for profit, \$49.21 and the profit per hour of labor, 38.1 cents. The amount of other labor is large for corn projects; otherwise the medians are close to the medians of the whole group of projects.

An attempt was made to compare pupil earning results with those of cost account and other farm management studies. The results of these studies of adult farming showed such great variation that no real comparison was possible. Such a comparison could be made if we had more pupil earning data available and if the states would agree on some uniform method of accounting in harmony with the best farm accounting practice.

This study is dependent for absolute

accuracy on more than 1,000 persons, all prone to err. It is useless to claim more than approximate accuracy. The author believes that sincere effort has been made to discover how well vocational pupils earn. His belief in the substantial accuracy of the data has increased with the progress of the study.

In conclusion, this study of more than 1,000 projects from all sections of the country gives us a view of the size and effectiveness of pupil earning. The most valuable result is the proposal of standards for size and efficiency which will enable us to see how the pupil earning program of a school compares with that of other schools.

The department of markets and rural finance of the University of Kentucky regularly supplies all of the teachers of the state with a publication called "Notes on the Agricultural Situation."

A contest of unusual interest in connection with the Pacific Coast Dairy Show was a "Milkmaid's Contest" participated in by representatives from various high schools on the coast. Ten medals were awarded. Pictures of competing milkmaids have received publicity thruout the country.

As a part of the annual state contests for students in vocational agriculture, Missouri conducts an entomology contest involving the examination of 25 specimens of economic insects regarding each of which contestants are asked to give the following information: common name, kind of mouth parts, where it winters, stage in which it passes the winter, number of generations per year, crops most seriously damaged, and control measures. The insects used for the contest are selected from a list which is sent out to prospective contestants.

# Our Leadership In Agricultural Education

DOCTOR EUGENE DAVENPORT, Apostle of Unity in Education

F ONE should seek to personify the best and the highest ideals of Amercan citizenship, as they have been conceived and lived from colonial days until now, he could find no better example than in Doctor Eugene Davenport, Dean Emeritus of the College of Agriculture of the University of Illinois. He is the true Uncle Sam to his friends who know him best, for he embodies all those fine qualities of soul which have been attributed by the best Americans to that Great Spirit—typical of American manhood—Uncle Sam. To us in the work of agricultural education Dean Davenport will always be remembered as a great teacher, pioneer and leader.

In an interview to get some of the interesting facts about Doctor Davenport's life for this article, he said to the writer, "Like many better men, I was born on a farm in southern Michigan and was almost literally rocked in a 'sap trough,' because from my earliest recollections the making of maple sugar and sirup was one of our principal industries. I have seen most of the country cleared of its timber in the region where I was born. And I, myself, spent more days in clearing land of timber and in ditch digging and tiling, than I ever did

in plowing."
Dean Davenport taught his first school at 18 and entered Michigan Agricultural College in 1875, and graduated with the class of '78. In those days the labor system at Michigan Agricultural College was used, and all students had to work every afternoon on fields, gardens and grounds for the magnificent pay of 10 cents an hour. Mr. Davenport lived and worked on a farm for 10 years after graduating from college. He returned to Michigan Agricultural College in 1888 to do some special study, but with no thought of abandoning the farm. While there as assistant in botany, on part time, he was appointed professor of agriculture in 1889.

In the autumn of 1891, Senor Louis Queiroz, a wealthy citizen of Brazil, came to the states in search of the man who could go home with him, and help establish in his country, what he called a "Leettle Lansing;" that is, a Brazilian edition of Michigan Agricultural College. Mr. Davenport was chosen, and went to Brazil to assist in this enterprise. Unfortunately, war broke out in Brazil and Mr. Queiroz had to abandon the enterprise. Mr. Davenport returned to the states in 1892 and went at once to his farm in Michigan, where he fully expected to send the rest of his days.

expected to spend the rest of his days.

He was called to the deanship of the College of Agriculture of the University of Illinois in 1895. He was also to be professor of animal husbandry and director of the experiment station. The vast opportunities in Illinois appealed to Mr. Davenport. Illinois was what Dr. Burrill called an imperial commonwealth. There were but five students in agriculture and three members of the agricultural faculty at that time. The principal energy along agricultural lines was directed to experiment station work.



Dr. Davenport

#### SOME OF HIS PRINCIPLES

"It is dangerous to attempt to teach a live boy with no reference to the vocational."

"In a system of universal education the best results will always follow when as many subjects as possible and as many vocations as may be are taught together in the same school, under the same management, and to the same body of men."

"Every properly educated man is trained both vocationally and liberally."

"The modern high school is not the lineal descendant of the old-time academy, and its primary function is not to train for college. It is a new institution, and its function is to train its natural and local constituency for the duties of life. It is as thoroly a public institution as is the state university, and it should serve its community in the same way and with the same spirit that the university serves the larger and more complex unit."

"There are great times just ahead if we are wise. The people will give of their substance freely if the education of their young can be made useful. If we can do this, then we can add to industry both culture and refinement; then will great souls arise from all walks of life and we shall be one people. I beg you, my fellow teachers, to study this problem as your religion. The fates have put it upon you to settle. A generation or two and it will be too late. As you settle it, do not shirk labor, do not fly to the separate school because it is easier, but treasure as your life, I beg of you, the universality, the integrity and the unity of the American educational system."—From his "Education for Efficiency," 1909.

Dr. Davenport remained in continuous service as dean of the College of Agriculture at Illinois until his retirement, for age, in 1922.

The distinguishing features of Dean Davenport's experience in Illinois might be summed up as follows:

First: The farmers of the state, thru their organizations, were in a frame of mind to help the university in every way to establish a real college of agriculture and experiment station. Second: In the absence of students they put the experiment station ahead and went to the legislature for an independent fund, each

association sponsoring a definite appropriation for work along its own particular line, such as animal husbandry, dairy husbandry, horticulture, crop production, etc. Third: There grew out of this quite naturally a system of so-called advisory committees under which the university men engaged in a particular line of work, were greatly assisted by a body of five of the leading farmers in that particular industry.

that particular industry.

Great interest and increasing loyalty grew toward the college of agriculture during these 27 years of service of Dean Davenport. The peak of attendance developed to something over 1,200 students and a faculty staff of something like 175 members. Upon his retirement in 1922 the following appreciation was expressed by the Assistant Dean, Fred H. Rankin, for the students and faculty of the college:

"The student body of the College of Agriculture desires to express to Dr. Eugene Davenport its deep appreciation for his distinguished leadership as Dean of the College of Agriculture and Director for the Agricultural Experiment Station. As he and Mrs. Davenport retire to their country home at Woodlawn, Michigan, the very best wishes of the students and faculty of the College and of the alumnical country with them.

go with them.

"The accomplishments of the past 27 years in agricultural education have not just happened to come to pass, they have been results of wise guidance and leadership. While many men have contributed to the College of Agriculture in the last quarter of a century, yet by his constructive wisdom, skillful management and organizing ability, Dean Eugene Davenport is abundantly entitled to all the credit he may ever receive for the development of the Agricultural College of the University of Illinois, and for the unique and unsurpassed service that he has rendered in the promotion of agricultural interests and of the affairs of the state at large.

"As a teacher, friend and citizen he has won the esteem and affection of students, faculty and the citizens of the state, and contributed largely to their intellectual and social well-being, in the way of projecting his personality into the minds and hearts of thousands of young men and women. Many people have come in contact with him and are proud to do him honor as a modest citizen, who has led an inspiring, wholesome life and who has efficiently discharged day by day the duties of the office which he has so skillfully administered. He has established in Illinois and the nation an honorable, rightfully earned and widely recognized name.

"As he severed his official connection with the University last September the student body and faculty bade him farewell with keen regret and take this occasion to extend to him the heartiest goodwill and best wishes."

The following is the closing paragraph of a splendid tribute to Dean Davenport by his successor, Dean Herbert W. Mumford:

"I count it as the greatest opportunity of my life to have been privileged to work under the leadership of Dean Davenport, and I regret that I shall never be able to find words to express adequately either to him or to the public, the deep apprecia-

tion of this privilege. One of my greatest ambitions is to so give an account of my stewardship that I shall be worthy the confidence he has always inspired. This is the way every man who is worthy of being called his friend feels about it. That is the essence of leadership."

A significant paragraph from an appreciation presented to Dean Davenport on the occasion of his retirement, signed by the President of the University and 177 of the agricultural faculty,

follows:

"As teacher, colleague, and citizen, you have won the esteem and affection of students, faculty, and the public by the elevation of your character, the breadth of your wisdom, the sagacity of your counsels, and the sure helpfulness of your spirit. We have looked to you as to a guiding star, for clear cut convictions, undaunted courage, and unfailing wisdom. You have done more perhaps than any other man to dignify agriculture. You have endeared yourself to your associates by your unselfishness."

Dean Davenport has always given wise counsel and guidance to vocational agriculture, not only in Illinois, but to the leaders of our thought in the whole country. The following quotation from his great book, "Education for Efficiency," states clearly his viewpoint:

"As I see it, every high school that has a natural agricultural constituency of any considerable importance should put in a department of agriculture on the same basis as its department of chemistry, and proceed to offer at least one year, and better four years of technical agriculture, taught from the standpoint of the farm; that is, for the purpose of making farmers, to be accompanied by such collateral instruction in the arts and sciences as shall provide a suitable course for such of its students as find their interests in the country and on the farm."

One of the greatest contributions which Dean Davenport has made to the cause of vocational education is his advocacy and leadership in the unity of vocational and general education. He has said with convincing logic:

"I can see no good and sufficient reason why a system aiming at a particular kind of efficiency should be cut off and separated from other systems aiming at other forms of efficiency, particularly when human life is enriched in proportion to its capacity for achievement and enjoyment."

This philosophy of the unity of education as advocated by Dean Davenport has had a determining influence upon the policies of vocational education, not only in the state of Illinois, but thruout the nation as a whole. His writings, public addresses and private counsels, have had much to do with the constructive and efficient programs of education in vocational agriculture.

This year Dr. Davenport has returned to the University of Illinois to assist the President in some of the larger plans and interests of the University.

(Written by Dr. A. W. Nolan, University of Illinois.)

The American Country Life Association holds its annual meeting in 1929 at Iowa State College, Ames, Iowa. The dates are October 17 to 20. This is the first time that the meeting has been held in the autumn, the purpose being to attract more farmers and homemakers. The 1928 meeting was held at the University of Illinois at the time of the summer conference of Illinois vocational teachers.

### Vocational Agriculture in Relation to Agricultural College Attendance in Virginia

E. C. MAGILL,
Professor Agricultural Education, Virginia
Polytechnic Institute

THE workers in the national program for vocational education in agriculture are interested in any facts which tend to show the influence of the vocational program. One group of friends in particular are those who are connected with the land-grant colleges. It would well behoove us to pass on to our friends any facts which prove that the welfare of the agricultural college, as far as its resident instruction is concerned, is very closely tied up with the success of the vocational program in the secondary high school system.

It is a well-known fact that the enrollment in the agricultural curricula of our land-grant institutions has suffered very materially during the past ten years. Virginia might be used as an illustration. In 1915-16, 32 percent of the four-year college enrollment consisted of students in agricultural curricula. From 1925-1928, the agricultural enrollment has been approximately 15 percent of the total enrollment. It has even been suggested that the development of the vocational agriculture program in the high schools has made it unnecessary for farm boys to go to the agricultural college to secure agricultural training. The facts in Virginia do not justify this statement, but in reality tend to show that the agricultural college enrollment would represent a very serious problem if it were not for the agricultural high schools of the state.

At Virginia Polytechnic Institute, there are more than six times as many graduates of agricultural high schools enrolled for agricultural training as there are graduates of all the other rural high schools. Here are the figures:

City high schools send 1 out of every 240 boy graduates.

Town high schools send 1 out of every 297 boy graduates.

Rural high schools send 1 out of every 122 boy graduates.

Agricultural high schools send 1 out of every 19 boy graduates.

Of the total enrollment of freshmen in agriculture, from 56 percent to 72 percent come from the 100 agricultural high schools of the state. The balance of the freshmen enrollment comes from approximately 250 rural, town and city high schools. The agricultural high school, certainly in Virginia, has in reality prevented the agricultural college from going bankrupt because of lack of students. The vocational program, it would appear, has not only been furnishing material for the agricultural college, but it has been taking approximately 50 percent of its graduates to be returned to rural communities as agricultural instructors.



Farm Shop at Fallon, Nevada

# A Project Revolving Fund

By B. F. TILLOTSON, Instructor in Vocational Agriculture, Boone, Iowa

THE ever-present problem of financing projects was solved at Boone during the past year by obtaining money at a local bank thru the backing of Farm Bureau officials. As soon as the financial needs of the boys could be estimated, I presented my needs to the Boone county poard of directors of the Farm Bureau for a revolving fund from which I could make purchases, pay freight and miscellaneous expenses, and make loans to the boys. When their questions regarding its use, the amounts of loans, insurance, and the like were answered, I obtained the signatures of the secretary and president on the note, which I presented to the bank. I was then able to secure the money at a reduced rate of interest.

In making the loans, bank notes were used and all notes, records and accounts were kept at the school. This year I have frequently reduced the amount of the note as loans have been returned. A new fund will be secured this spring. However, it might be well to carry the fund on from year to year as a continuous revolving fund. I usually send the board of directors a report semiannually, showing the use made of the money, the number of boys helped, and including a financial statement.

I have used this method of financing projects for five years, employing it first at Chazy, New York. I believe that its special advantages are:

First, it provides a ready fund from which to buy miscellaneous equipment, supplies and feeds for the boys which are essential but which they lack the means to get.

Second, it provides a source of money for loans which I find very helpful in getting boys started, particularly in cases where the parents are not sufficiently interested or are not financially able to offer the boy the capital needed.

Third, it enables one to buy in bulk and to sell to the boy at much reduced rates such materials as feeds, and spray materials, thus affording a saving that more than pays the interest costs.

This involves some bookkeeping and inconvenience, but in five years, with funds ranging between \$300 and \$1,500, I have never been troubled with collecting accounts and I have yet to lose the first dollar.

Oklahoma is contemplating a three-weeks' summer course for teachers of vocational agriculture to be given under the direction of Dr. D. C. McIntosh, head of the department of agricultural education at the Oklahoma College of Agriculture and Mechanic Arts. The course will be presented if there is sufficient demand in the state.

Henry C. Groseclose, executive secretary of the Future Farmers of America, is now serving as acting inspector of secondary schools for the state of Virginia, with headquarters at Richmond.

"The Vocational Farmer" is a 24-page publication with a special cover which is issued quarterly by the department of vocational agriculture of the McKenzie, Alabama, high school. This periodical has been appearing regularly for several years. W. L. Walsh, instructor, is editor.

# A Ten-Year Alabama Community Program

By J. E. MORRIS, Instructor in Vocational Agriculture, Ramer, Alabama

HREE years ago we developed a community improvement program at Ramer, Alabama. This program, which was developed as a working guide for the department of vocational agriculture, was projected on a ten-year basis. Thirty objectives were set down. These objectives, with desired goals, were classed under five main heads as follows: (1) Home Improve-ment; (2) Crop and Soil Improvement; (3) Horticulture; (4) Animal Husbandry; (5) Farm Management. This outline has enabled the vocational agriculture teacher to put over some defi-nite pieces of work in the community.

In the very beginning of this ten-year program it was decided that home beautification was one of the things that should be stressed in the community. At a conference of the principal, home economics teacher, and vocational agri-culture teacher, plans of procedure were worked out for this work.

The first step taken was that of beautifying the school grounds. This job called for quite a bit of capital as the grounds extended over an area of 10 acres. The agriculture teacher, assisted by the home economics teacher, county farm and home demonstration agents, created a community-wide spirit on the subject of community fairs, which resulted in the community having a community fair annually and exhibiting the best products at the state fair in Montgomery. For four years the community has exhibited a booth at the state fair, winning three first prizes and one second prize. For the four years a total of \$700 was won in prizes.

Part of this money and a liberal donation of \$300 from the county board of education supplied the money to start the school ground beautification pro-

While the school grounds were being beautified the two teachers were also busy teaching adult evening classes, using for their subject Home Beautification and Improvement. Such schools were organized in Ramer, Smilie Town, Grady, and La Pine-four communities within a radius of ten miles from the high school. Instruction was given to 62 families and more than 200 individuals, who are putting into practice the ideas learned in the schools. The vocational teacher is assisting the people by drawing plans for the home improvement and by buying shrubbery and other supplies for the beautification program.

Shrubbery valued at more than \$2,000 has been planted and large orders will be placed this

fall.

The vocational instruction does not stop at the front door of the homes. Along with the beautification program home improvement work was taken up by several families, which resulted in eight homes being

remodeled and painted on the inside and 16 homes being repaired and painted outside

A community survey showed that 90 percent of the homes secured their water supply from wells several yards away from the kitchen door. By cooperating with the county home agent the vocational teachers have been able to persuade seven families to install running

water systems in the home.

Four years ago the riding cultivator as a farming tool in this section was looked upon by the farmers as a joke. In the spring of 1926 thru the cooperation of the agricultural engineering department at Auburn, two cultivators were placed in the community as a test project. One cultivator was placed on the farm of L. C. Curry and one on the farm of W. J. Dendy. R. C. Whatley, a local farmer, bought one for his farm this same year, making a total of three cultivators in the community. Altho the cultivators were used for only a few cultivations they were pronounced a success. This year there are 19 riding and walking cultivators in the community, with the possibility of doubling this number for 1929. Mr. Whatley was so thoroly satisfied with the cultivator proposition that he is requiring his croppers to use cultivators where conditions permit before he agrees to furnish them for the year. He now has eight cultivators and expects to have more.

From a survey made in 1924 it was found that the average hen of the community produced less than 50 eggs per year A similar survey made in 1928 reveals the fact that the average hen now produces 115 eggs each year, a 130 percent improvement in four years.

Thru the boys taking vocational agriculture and thru evening classes, poultry rallies, county poultry schools, culling demonstrations and poultry tours, the people have learned that they must have good stock, good houses, good feed, and the proper care of poultry before they may expect a profit from poultry. Seeing these things has encouraged the people to improve their home flocks. Several people have become so interested that they are now in the poultry business on a commercial scale. Mrs. J. A. Reddoch of Fleta, Alabama, has a flock of 2,500 birds that are now producing around 100 dozen eggs per day. Mrs. J. W. Sellers has a flock of 1,000 hens, and C. E. Mills of Grady, Ala-bama, has a flock of 300 birds. Others are in the business on a smaller scale.

Much stress has been given to the subject of soil improvement by the vo-cational teacher. The farmers are urged to first terrace the land and then improve it by the use of cover crops.
Recently, the Ramer Industrial Club

for men has been organized in the community for the purpose of developing a definite program of work that will bring to Ramer community better economic, social, and educational conditions so as to make farming more profitable and country life more attractive.

The program outlined for the future will touch several things that should be

of interest to the farmer.

First, that the farmers produce more food for the family and feed for farm stock on the farm.

Second, the improvement of farm lands by using winter cover crops and terraces, and the cost of crop production be cut by using modern farm ma-

Third, a better cooperative program of marketing farm products be adhered

Fourth, improvement of hogs and dairy cattle by introducing purebred sires. Plans are now under way whereby the boys taking vocational agriculture will be financed by the Montgomery Chamber of Commerce to buy purebred sows to carry as home projects.

Fifth, more attention be given to beautifying the farm home, and more modern conveniences be installed in order to make country life more attractive, thereby encouraging the farm boys and girls to remain on the farm .- The

Progressive Farmer.

### Nevada Boy Makes Record

ONE of the best yields of alfalfa hay ever recorded in Nevada was obtained by William Stodeick, a student in the vocational agriculture department at Gardnersville, Nevada. He secured a yield of 73 tons from his 10-acre alfalfa project or 7.3 tons per acre. The hay was cut three times during the season.

The market value of the cured hay was \$10.50 per ton making a total re-turn of \$766.50. The total expenses in-cluding rent of land, hired man and horse hours and use of machinery and equipment amounted to \$304.80. This gave him a labor income of \$461.70.

Bill expects to continue with his alfalfa project thruout his four years in high school as well as conduct other farm projects.

This year he has been operating a laying flock proj-ect of 400 hens. Indications are that his hens will also give him a good profit for his labor.

Bill is very in-terested in farming. He gladly and cheerfully tells everyone his main objective is to become one of the best farmers in his community.



William Stodeick's alfalfa project

# --- Professional News---

### Maryland State Conference on Agricultural Education

THE annual state conference on Agricultural Education was held at Baltimore, Maryland, on February 8 and 9. J. D. Blackwell, state director of vocational education, was chairman of the first session at which the topic, "Increasing the Efficiency of Supervised Practical Work" was discussed. Paul Frank, teacher of vocational agriculture at Berlin, Worcester county, outlined ways for the coordination of project plans, study and supervision. Mr. L. E. Taylor of Centerville also stressed the importance of increasing the efficiency of project work.

Mr. Donald Watkins of Mount Airy, chairman of the committee on project book revision, suggested a number of slight changes in the project record book now being used and, thru the use of charts, illustrated the manner in which the keeping of project record books should coordinate with the teaching of

Mr. E. C. Baity, teacher of vocational agriculture at Street, Harford county, listed the types of supervised practical work other than project work to be fostered by the agricultural teacher. Mr. H. C. Fetterolf, assistant director of vocational education for Pennsylvania, described the statewide project contest held annually in Pennsylvania. Mr. Fetterolf also spoke briefly on the agricultural demonstrations given annually in connection with the Pennsylvania State Farm Products Show.

Mr. Charles Remsberg, teacher of vocational agriculture at Middletown, reported for the committee on the preparation of a bulletin entitled "Practical Activities in Plant Production," which bulletin will be published during the summer of 1929.

The first session was closed with remarks by State Superintendent Albert S. Cook.

The second session, which was presided over by H. F. Cotterman, professor of agricultural education at the University of Maryland, was devoted to a discussion of ways in which agricultural teachers may cooperate with other agricultural agencies. Mr. M. M. Stewart, secretary of the Maryland Farm Bureau, outlined ways in which the local Farm Bureau authorities and teachers of vocational agriculture may cooperate. Mr. William Towner, assistant editor of the Maryland Farmer, called attention to the need for a wider circulation of the Maryland Farmer within the state, since the magazine is devoted almost entirely to Maryland activities

G. W. Patteson of Washington, D. C. Rohde of Pikesville, Maryland, and E. K. Walrath of Westminster, each spoke briefly on the ways in which teachers of vocational agriculture may cooperate with commercial agencies closely related to agriculture.

Dr. K. A. Clark of the University of Maryland outlined plans whereby the agricultural teachers may cooperate with the extension service of the uni-

versity in the carrying out of baby beef projects.

On the evening of February 8, the members of the agricultural conference met with members from the other sections of the Maryland State Society for Vocational Education at the annual banquet which was presided over by Riley Williamson, president of the association. Group singing was led by Thomas L. Gibson, state supervisor of music, accompanied by Miss Ruth E. Hobbs of the Maryland State Department of Education. The address of the evening was given by Mr. Theodore McKeldin, secretary to Mayor Broening of Baltimore, after which the evening was devoted to entertainment.

Mr. Donald Watkins, vice-president of the Maryland Agricultural Teachers Association was chairman of the last

session of the conference.

Mr. John J. Seidel, state supervisor of industrial arts, reported for the committee on the coordination of farm shop work with industrial arts. Professor Ray Carpenter of the University of Maryland, a member of the committee, also spoke briefly in support of the committee report.

The work of the Maryland chapter of the Future Farmers of America was discussed by L. G. Worthington of the University of Maryland. Mr. Worthington advised that Maryland was the ninth state in the United States to receive a charter and that there are already approximately 20 local chapters in Maryland. Professor Cotterman of the University of Maryland outlined plans for the state public speaking conplans for the state pathe university of test to be held at the University of Maryland in May, 1929. The topic will Agriculture as a Vocation, Mr. Harry McDonald of Frederick, chairman of the judging contests committee, outlined the plans for the contest to be held in connection with the Frederick fair in October, 1929.

Mr. Harold Remsberg of Smithsburg explained the district judging contest as it is held annually at Hagerstown and urged the holding of additional district judging contests.

The following objectives for 1929

were adopted:

1. The holding of statewide project and agricultural demonstration contests. 2. The completion and publication of

a bulletin entitled "Practical Activities in Plant Production.

3. The increasing of the efficiency in farm shop work.

#### THE TRAGEDY OF **IGNORANCE**

"That there should one Man die igno rant who had capacity for knowledge: this I call a tragedy were it to happen mere than twenty times in the minute, as by some computations it does. The miserable fraction of Science which our united mankind, in a wide Universe of Nescience, has acquired, why is not this, with all diligence, imparted to all!"

-Carlyle.

4. The organization of local chapters of F. F. A. in each of the 40 agricultural departments.

5. The revision of the project record

# Professional Improvement

J. H. PEARSON, State Supervisor, Nebraska

ONE of the unsatisfactory elements in the farming occupation and the reason why it is difficult to promote a progressive movement among farmers is the fact that they are rather isolated persons, each one seemingly living unto himself. This was more pronounced in the past than it is today, with the telephone, rural free delivery, automobile and radio. Conditions are changing rather rapidly. One mark of progress among farmers is their ability to meet the changing conditions.

"Many agricultural teachers have been guilty of severely criticising farmers because they would not attend evening schools and other meetings where they would have an opportunity to learn about recognized improved methods of farming. Some of these same teachers have been even slower to change to more progressive steps in vocational agricultural education than the farmer has in his methods. The trouble. in some cases, has been that the teacher has, of his own free will, so isolated himself that he has not come in contact with the newer ideas in vocational agricultural education. He is, in this case, more open to criticism than the farmer because he is, by virtue of his position, recognized as a leader."—Nebraska Vocational Education.

The agricultural teacher training activities of the University of California have this year been transferred from Berkeley to Davis. Professor H. M. Skidmore remains in charge. Other changes have been made in the organization for teacher training which are quite radical, particularly in that they provide for much more training on the job and less resident training. These changes will be described in a coming article by Professor Skidmore.

#### On Your Mark!

A T THE annual meetings of the Okla-homa Education Association held at Oklahoma City, February 7-9, a state organization of vocational education workers was affected, including all divisions of the service. The agricultural division was privileged to furnish the president and vice-president. They were John H. Murray, president, and Robert N. Wall, vice-president. Mr. H. F. Rusch of the trade and industrial division, was elected secretary-treasurer.

D. M. Clements, state supervisor of vocational agricultural education of addressed the agricultural division in their departmental meetings. A feature of the meeting was the fourth annual jollification banquet participated in by all divisions of vocational educa-

# Two Strong State Associations

### The New York State Agricultural Teachers Association

By H. L. SMITH, President

A CCORDING to the constitution, the object of the New York State Agricultural Teachers Association is the promotion and improvement of the teaching of agriculture of less than college grade. This objective is being accomplished by the association not so much in a direct way: eg., lesson planning, job analysis, etc., as by an effective indirect route: Young Farmers' Clubs, Judging Contests, Speaking Contests, etc. By the latter method a "punch" is being put into the agricultural teaching, an indefinable something which if lacking makes all teaching a deadly thing for both teacher and student.

One of the most important functions of our association has been the open and free discussion in its meetings of policies affecting the teacher and his work. The men have felt free, thanks to our state supervisor, Mr. Getman, to voice opinions concerning their work as teachers.

#### The Association's Development

The New York Association was organized in 1911. For several years the annual meetings were held in connection with the Convocation of Principals and Superintendents at Syracuse, N. Y. The attendance at these early meetings was small, due no doubt to the fact of meeting in the Christmas holiday season. Beginning with 1918, the annual meetings have been held in the summer during the Professional Improvement Conference. As with many organizations the association seems to have had its trials in the beginning. As late as 1917, six years after its formation, the records show only 15 teachers as members. This could not have been more than onethird of the high school teachers of agriculture in the state at that time. There has been, however, a vast improvement in this respect during the past 11 years. In 1928, there were 143 high school and state school teachers of agriculture, of which all but two were members of the association. The early reports of the treasurer show deficits, or so small a balance on hand as to be negligible. Recently the balance in the treasury was large enough so that it was deemed advisable to put part of it in a savings bank to draw interest.

#### **Expanding Functions**

During the first years the association did little except at its annual meeting. At the present time the organization The New York State Agriculfinances. tural Teachers Bulletin," issued five to six times a year. In order to provide group meetings for professional improvement during the year, the state was divided into twelve regional districts, every teacher of agriculture becoming a member of a group. The group meetings have done much to help the men in their teaching, by providing opportunities for exchange of experiences and also for talks by specialists from the college, who give the men the latest "tips" in their respective fields. At these local gatherings our men also have an opportunity to discuss matters of importance to the whole association. This makes for more thoughtful and consid-

ered action at our annual meetings.

The judging contests for vocational agricultural students held at the New York State Fair were being poorly attended until the association took hold under the direction of Mr. Weaver, assistant specialist in agricultural education. He and committees appointed by the group have worked out a very acceptable plan for the conduct of these competitions; and instead of a mere handful, there were 62 schools and 250 contestants entered in the judging contests last year. Like results have been accomplished thru the efforts of the association in the conduct of the contests at Farmers Week at the State College.

Since 1925, project notebook covers and charts used by the teachers have been purchased by the secretary of the association and sold to the instructors. This has resulted in a material saving.

A recent innovation being pushed by the association is the statewide speaking contest for students taking vocational agriculture. Ability to speak convineingly is a decided asset to anyone and especially to farmers. In the past the farmer has, all too frequently, let his cause be voiced by others. In the future, if he is to get a fair hearing, he must speak for himself. Anyone who heard the annual speaking contest at Syracuse last fall had an opportunity to see some of agriculture's future spokesmen.

The development of the Young Farmers Club for the boys enrolled in agriculture in the high school and state schools is a new and extremely promising yenture, sponsored by the association. The accomplishments of the New York State Agricultural Teachers Association have been gratifying. There appear to have been no setbacks since its organization 17 years ago. Constant progress has been made, and the future looks bright with promise.

### Georgia Chooses Five Master Teachers

EORGIA is apparently the first state to have selected more than one Master Teacher. Besides the one chosen for the state-at-large in 1928, Mr. O. C. Aderhold of Jefferson, whose story was told in the February issue of Agricultural Education, four others were selected, by districts. They are George W. Dickinson of Hahira, L. E. Cox of Epworth, E. C. Young of Centerville, and E. W. Graham of Brooklet. Mr. Young was the Master Teacher of the state in 1927. Mr. Graham, the youngest man in the group, began work in his community only a year ago but his work in teaching evening classes and in organizing for cooperative marketing was so outstanding as to give him the lead in his district. Dozens of cars of corn and hogs have been shipped from his community by groups organized by Mr. Graham. Mr. Dickinson, who acts as superintendent of schools in addition to carrying his regular duties as teacher of agriculture, had as a part of his record the distinction of having enrolled 76 persons in evening classes during the year. Mr. Cox even excelled this record for evening school enrollment with 85 persons in his classes.

# The Ohio Association of Vocational Agriculture Teachers

By H. G. KENESTRICK, Itinerant Teacher Trainer, Ohio State University

THE Ohio Association of Vocational Agriculture Teachers, including in its membership the 190 teachers of vocational agriculture employed in the state, is composed of 11 district groups, ranging in number of teachers from 7 to 23.

An important function of the association, performed thru the state executive committee, is to serve in an advisory capacity to the supervisory and teacher training staffs in the formulation of policies. The executive committee is made up of the president, the vicepresident and the secretary-treasurer of the state association and the chairmen of the district groups, a total of 14 members in all. The committee meets at least twice, and usually three times a year, including the meeting at the time of the annual conference of all teachers. Such questions as the formulation of the program of the annual conference, the general plans for the state judging contests, and the setting up of goals in a state program of work, are examples of the type of problems in the solution of which a contribution is made by the executive committee. Thru their direct contact with the district groups, the members of the committee are able to intercept the sentiment of these groups on the various questions raised, and to convey to the groups a clear explanation of actions taken as a result of the advisory service of the committee.

### District Organizations

The organization of the district groups provides a means for promoting and conducting sectional activities. Since the chairmen and vice-chairmen of the district groups are elected for two years, there is opportunity for teachers with ability in leadership to stimulate their groups in the development of worthwhile programs. Approximately half of the districts elect chairmen in any given year, and this scheme of alternation improves the effectiveness of the state executive committee, in that there is never a complete change in its personnel at one time. In addition to the conference held in each district once a year, as part of the teacher improvement program sponsored by the supervisory and teacher training staffs, each district group holds one or more other meetings on its own initiative. At least one dis trict has organized a year's program of monthly meetings with program committees and main topics for discussion named at the beginning of the year. Teachers feel that the discussion of their common problems at these meetings is exceedingly helpful.

Thru the state and district meetings, with the increased opportunity for discussion of timely questions, has come about a noticeable improvement in coordination of the work in the departments in the various sections of the state.

Professor C. R. Wiseman of South Dakota State College, Brookings, S. D., received the Ph.D. degree from the University of Minnesota at the close of the summer session in 1928.

# The Occupational Status of Vocational Agriculture Graduates In Massachusetts

By R. W. STIMSON, State Supervisor, Massachusetts

SURVEY has been made to determine the present occu-pations of all who, since the first school of this home project type opened in 1908, have had one year or more of education at the various vocational agricultural schools and high school departments in Massachusetts. This month the returns have been tabulated and charted. Some of the findings are shown by the accompanying chart and summary. Further comment follows:

The number whose occupational status is known is 2,157. This is 74 percent of the whole number whose whereabouts were sought, thus leaving 629 not found. Assuming, as the Federal Board for Vocational Education has done in its bulletin No. 82 on page 19, that if found such an unaccounted for group would be distributed among the various occupations in the same proportions as those whose occupational status is known, the total of "known occupa-tional status" (2,157) is used as the base figure for the percents given on the chart and in the table, and those which follow.

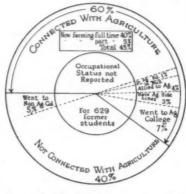
A factory village department, with 89 percent found, has 86 percent connected with agriculture. A country village department with 100 percent found, has 84 percent connected with agriculture. The former served a surrounding farming territory, but was killed in a political fight which had nothing to do with the merits of this kind of education. The latter has steadily grown in influence and has an enrollment now of 31—all but one (an infantile paralysis victim for whom an outdoor occupation has been prescribed) from farm homes

The first separate school, with 70 percent found, has 74 percent connected with agriculture.

Of the three county agricultural schools: One, with 87 percent found, has 63 percent connected with agriculture; another with 70 percent found, has 59 percent; and the third, with 44 percent and 69 percent found at its two centers, has respectively 43 percent and 57 percent connected with agriculture

Certain experimental departments, soon discontinued, but not until after MASSACHUSETTS VOCATIONAL AGRICULTURAL SCHOOLS AND DEPARTMENTS

Graduates in Agricultural and Allied Occupations



Connected with agriculture 6	0 %
Farming full time 40%	- ,-
Farming part time 5%	
In agricultural education 1%	
In business allied to agriculture 4%	
Have agricultural side lines 3%	
Went to agricultural college 7%	
Not connected with agriculture 4	0%
Total	0%

Fewer than 5 percent of the people in Massa-chusetts are on farms. The above results, with more than 95 percent of the people in attrac-tive callings which are everywhere competing for boys and drawing them cityward, are remarkable

Percentages are based on the known occu-pational status of 2.157 persons trained one year or more. Others similarly trained but not found numbered 629.

found numbered 629.
Went to agricultural college, some of whom are thru college and now farming. 7 percent.
Went to non-agricultural college, 5 percent.
(Tabulation of a survey closed in 1927 of 2,157 trained one year or more.)

thoro trial, account in large part for the lower average for the whole period and for the whole state. One such, near a summer resort, with 100 percent found, has the lowest ratio, 17 percent, now connected with agriculture.

Our diagram is like one published by the federal board for vocational education for the whole country, based on

sample groups from the various states. These selected groups showed: 74 percent connected with agriculture, and 26 percent not connected; 9 percent who went to agricultural colleges and 15 percent who went to non-agricultural colleges. If the group we furnished, according to the specifications for its selection given us, had been used for our diagram, our percent connected with agriculture would have been 80 percent. Total counts are shown in our diagram, and not selected case counts.

Vigor, handiness, and versatility are factors which have operated to extend the benefits of the training but to cut somewhat the percentage of those now connected with agricul-

Vocational agricultural education is rich in open air and muscular activities, in shop work, in outdoors construction and repairs, and in automotive repair, adjustment, and operation features; also in purposeful thinking, purposeful planning, purposeful managing, measuring, and accounting. Half the school day in high school departments is given to general education, English, history, civics, science and the like.

Frequently, it has been discovered, pupils and parents have felt that the agricultural course is the "most practical" course in school, that more can be salvaged out of it in health, handiness, and common sense ideas about business and public affairs for nonagricultural uses than out of any other course open to their choice and, in consequence, that agricultural courses have been taken and all project and other farm practice requirements have been cheerfully met where the events proved there had been no intention to follow agricultural careers.

There can be no doubt that, tho bad for the chart, this has been good for the boys

Conclusion, vocational agricultural education, in short, is an open door of opportunity to robust and wide-awake education which has been and now is appreciated by thousands of boys in rural communities who have had its advantages

each strip and strips are available on 69 different subjects. Pennsylvania State is also among those institutions which have recently begun the distribution to instructors of new technical information in agriculture; its publication is known as "What Is New in Agriculture," and began with the October issue, 1928.

The Twin Falls, Idaho, department of vocational agriculture raised \$450 in November to send its judging team and coach to the American Royal at Kansas City. Among other activities carried on to raise this amount was that of digging a field of potatoes. All agricultural classes participated, earning \$75 in this

A committee representing the college of agriculture, the state grange, and the vocational agriculture forces of the state is working upon a plan for an Ohio state oratorical contest. The representatives from these groups are, respectively, Dean Alfred Vivian, J. W. Fichter, and State Supervisor Ray Fife.

Six teachers in the section supplying Tulsa, Oklahoma, with milk have been cooperating during the winter in offering evening courses in dairying.

"I have no reforms to recommend, except the liberation of intelligence, which is the first and essential one."— James Harvey Robinson.

Mr. W. P. Beard, for many years in charge of the practice department of the South Dakota State College at Brookings, has assumed the position as state supervisor of South Dakota, Mr. Beard has been teaching vocational agriculture in the Brookings high school since the organization of the department 11 years ago.

The rural education department of Pennsylvania State College provides Pennsylvania instructors with a "film strip" service. These strips are of standard size and can be used with a projector made for that purpose or with an attachment to an ordinary projector to fit the film. There are 30 to 70 pictures in

# Measuring Results In Agricultural Education

By CHARLES EVERETT MYERS

Chairman A. V. A. Committee on Research in Agricultural Education

URING the year 1927, the A. V. A. Committee on Measuring Results in Agricultural Education worked intensively (for a scattered committee) and presented a report at Louisville. The report was presented briefly and practically all the time was devoted to free discussion of the mimeographed plan passed out. Tho some were skeptical of the plan, there was a unanimous vote that it be given a try-out. The plan contemplated securing an index of the effectiveness of vocational education in agriculture as indicated:

First: By the extent to which former students entered and remained in agri-

cultural work.

Second: By the immediate effect the teacher's efforts have upon the pupil's learning and earning in agriculture.

Third: By the relative efficiency of trained and untrained farmers.

As the first phase of the proposed plan had already been organized by Doctor Lane and the chairman of the committee, the committee permitted them to go ahead and assume full responsibility for it. The cooperation of the states in this phase of the work was wholehearted and almost complete. Only two states failed to furnish data for the study. The report has been published as Federal Board Bulletin No. 82 Revised: "Effectiveness of Vocational Education in Agriculture as Indicated By the Occupational Status of Former Students. The revised portions of the bulletin make no comparisons between the states, but it is now established beyond any reasonable doubt that for the country as a whole from 60 percent to 75 percent of the former agricultural students have entered and remained in agricultural work during the past ten

The second phase of the project contemplated making a rather detailed study of the learning and earning of students in the same schools surveyed for occupational records. The conditions of the study were such as to demand almost complete cooperation from the states to make the results useful for the purposes in mind. Such cooperation for the second phase of the study was not obtained. The committee working under the leadership of Dr. Lathrop developed a plan for reporting student earnings which is intended to make the results comparable, regardless of the type of enterprise or section of the country from which they come. The pupil learning study made no appreciable advancethe only positive result of importance was simply a confirmation of what had been previously demonstrated, namely, that tests of agricultural information are now available which will measure differences in pupil learning and are useful for experimentation.

The committee, at its meeting in Philadelphia, decided that it would not attempt to push the second phase of its study until there was a more general demand for objective measurement in this field. However, state supervisors, teacher-trainers, and teachers of agriculture are urged to use the plan for computing pupil financial returns recommended by the committee and also to use and experiment with standardized agricultural tests. The members of the committee will be glad to consult with anyone who desires to work in the field of measuring the immediate effect the teacher's efforts have upon pupil learning and earning in agriculture.

The third phase of the committee's objective, "measuring the relative effi-ciency of trained and untrained farmers," has been blocked out in general outline. It now appears feasible to select a representative sample of young, trained farmers who have been farming since 1922 and compare their social standing and financial earnings with a comparable group of untrained farmers. Such a study must depend upon the law of averages for its reliability, appears feasible only on a national scale and should have 100 percent cooperation to make it fully satisfactory. The committee is at work upon the detailed plans which it hopes to have ready for a preliminary try-out in time to report at New Orleans.

The personnel of the committee for

1929 is as follows: Dr. C. E. Myers, State Department of Public Instruction, Richmond, Va.; Dr. Sherman Dickinson, University of Missouri, Columbia. Mo.; Dr. F. W. Lathrop, University of Minnesota, University Farm, St. Paul, Minn.; Prof. H. M. Skidmore, University of California, Berkeley, Calif.; Prof. J. T. Wheeler, Conversity State, Callege of Assistance of Control o Georgia State College of Agriculture, Athens, Ga.; Dr. R. M. Stewart, New York College of Agriculture, Ithaca,

# Summer Short Courses for Vocational Agriculture Teachers

By PROFESSOR N. E. FITZGERALD, University of Tennessee

IN 1927 a study was made by the writer of this article for the purpose of determining the number of special short courses for teachers of vocational agriculture offered by the land grant colleges of the United States. A similar study was made in 1928 and a comparison made of the data in order to see what was the tendency. Of the 39 states answering the questionnaires in 1928, 17 reported special summer short courses for teachers of vocational agriculture, these courses being less in length than the regular summer session in that particular school. In 1927 only 15 states reported as offering these courses

The length of special courses offered for credit varies from two to four years. Graduate credit is given for work done in these special short courses in all states except two. There were five states reporting graduate credit for a two weeks' special course, eight states for a three weeks' special course, and five states for a four weeks' special course.

The states offering these special courses are scattered widely over the United States. Those offering a two weeks' course as reported in the 1928 study were: Kentucky, New York, Virginia, and West Virginia.

Those offering a three weeks' course were: Alabama, Colorado, Nebraska, New York, Tennessee, Texas, Utah, and Wyoming.

Those offering a four weeks' course were: Kansas, Missouri, Oklahoma, and

South Carolina.

No special study was made in 1928 of the number of institutions granting undergraduate credit for attendance at these special short courses, since in the 1927 study it was found that relatively little emphasis was placed upon this phase of work.

Most of the states offering special short courses were found to offer a larger number of courses in agriculture than were offering education. It seems to be as much the desire of the various states to make it possible for teachers of agriculture to get up-to-date information on agriculture as well as to learn new methods of teaching.

The "National Association of Vocational Agriculture Teachers" was formed at the time of the American Vocational Association convention in Philadelphia in December. Mr. Frederick Woelfle of Central High School, Paterson, New Jersey, is secretary-treasurer.

### Camp for Future Palmetto **Farmers**

THE Rotary Clubs of Walhalla, Seneca, and Westminster have bought and are donating to the Future Palmetto Farmer organization of South Carolina 50 acres of land for a summer camp and outing.

This land lies well up in the mountains on Little River near the D.A.R. school

for Southern mountain girls.

Plans are already on foot for building cottages, securing water and lights for the use of the camp. The lights will be secured from the power plant of the D.A.R. school. It is hoped that the camp will be open for the summer season of 1929.

The February issue of the Tennessee News Letter reveals that, up to that time, \$3,229 had been pledged by 78 chapters of the F. F. T. toward their permanent summer camp. Plans for the camp are ready and building was scheduled to begin not later than April 1. The annual convention of the state chapter is to be held April 26 and 27 at Nashville.

### The Achievements of a Master Teacher

A YEAR ago, Tennessee chose Mr. Fate Bull of Clarksburg as its Master Teacher. Subsequently he was chosen the master teacher of the Southern Region. Still later he was made a district supervisor in Tennessee.

Mr. Bull's score on the state score card was 950.2 out of a possible 1,000. Mr. D. P. Clements, state supervisor, detailed the following facts regarding this first regional master teacher at the time of his choice

1st: Mr. Bull came to the Clarksburg community seven years ago and has been there ever since.

2nd: His community is purely rural and all the people farm. He lives five miles from a railroad.

3rd: He is married, and has two chil-

4th: He owns his own home.

5th: He knows the habits and customs of his people and abides by them.

6th: He is active in church work in the community.

7th: He has the unqualified support of his principal who has been there since Mr. Bull came on the job.

Sth: Mr. Bull conducts two all-day classes, two evening classes, one parttime class, and one day unit class each

9th: When he came to Clarksburg sweet potatoes were not grown commercially. Today there is one cooperative house with a capacity of 8,000 bushels and seven individually owned houses with a total capacity of 7,000 bushels. Farmers now know how to grow sweet

10th: When he came to Clarksburg cotton was the only cash crop and the average yield in the community was only 450 pounds of seed cotton per acre. To day the average yield on 85 percent of the farms is 600 pounds of seed cotton. The average yield of his vocational agriculture boys is 1,160 pounds of seed cotton per acre

This year Mr. Bull had 16 boys to grow 28 acres of cotton cooperatively. They bought their seed and fertilizer together, they planted at the same time, cultivated alike and harvested together. They ginned 24 bales from the 28 acres. A buyer paid them \$7.50 per bale premium over the market price because of the quality of the staple.

11th: The community has standardized on two varieties of purebred corn— Neal's Paymaster, and Mosby's Prolific.

12th. One thousand acres of land bave been terraced and this has meant a saving of \$10,000 to the farmers of the

13th: Before Mr. Bull came to Clarksburg there was no such thing as a community fair. Now the people have a twoday fair each year. The attendance runs as high as 2,000 each day.

14th: New crops have been intro-duced successfully. In addition to sweet potatoes the farmers have been making money each year on tomatoes and strawberries. They are now growing cabbage for the market. The vocational agriculture boys grew and distributed to the farmers 60,000 tomato plants last year and they are now producing 100,000 Charleston-Wakefield cabbage plants for the farmers.

15th: His people are for him 100 percent. I talked with numbers of them during the three days I stayed there. I

have written testimonials from 40 of the best farmers of the community. They say living conditions are better now they have more home comforts than they ever had and that all of them have more money in the bank and are spending more.

### Utah School Studies Graduates' Records

A SURVEY conducted by Professor H. E. Lattig, head of the department of agricultural education of the University of Idaho, has shown that on April 1, 1928, the boys who had been enrolled in all of the 24 departments of vocational agriculture during the school year 1922-23 were distributed as follows: Da

rereer	uuge
Farming	43.5
College of Agriculture	4.9
Occupations related to agriculture	2.7
Colleges other than College of	
Agriculture	10.4
Occupations unrelated to farming.	
Dead or unknown	

Eight hundred twenty boys were included in the study.

### Few Town Students Farm

K ANSAS State Agricultural College is responsible for a revealing study of the careers of farm boys and town boys in Kansas who have taken high school courses in vocational agriculture. This study has only recently been made

The investigators studied 2,939 young men (2,308 from the country and 631 from towns), who had completed two or more units of work in vocational agriculture, and who were no longer in the high school at the time of the study.

Sixty-three percent of those who came from the farm were found to be in farming occupations while only 9.6 percent of those originally from towns were engaged in farming. Nine percent of the town boys and 4 percent of the farm boys were in occupations allied to farming.

The two groups were found to be nearly identical in the percentages attending agricultural colleges, the per-centages of those farming who were farming with their fathers, and the percentages of those farming who owned their own farms.

A slightly higher percentage of the town boys graduated from high school (70 percent versus 62 percent) More town boys than farm boys were farming in their own right (30 percent versus 23 percent).

Grouping together those who were farming, those working in occupations related to agriculture, and those attending agricultural colleges, it was found that 26 percent of the town boys were included while 74 percent of the farm boys classified in one of these groups.

### A Convincing Lecture

WASTE in Human Energy and the Cost of Untrained Youth," is the title of an address recently given by Edward T. Franks, vice-chairman of the Federal Board for Vocational Educabefore the International Boys Work Conference at Washington, D. C. This is a very interesting address, filled with facts of the sort needed to convince laymen of the need for vocational education. It is available without cost from the Federal Board for Vocational Education, Washington, D. C.

### Summer Evening Schools in South Carolina

VERD C. PETERSON, State Supervisor

A SUMMER school for vocational agricultural teachers in South Carolina was conducted at Clemson College from June 9 to July 7, 1928. The entire school was devoted to the training of agricultural teachers in service to do more effective evening class work with adult farmers.

Thirty-four vocational agricultural teachers of the state were selected by the state supervisors and delegated to attend this school. These teachers came from 34 different communities in the state.

When the teachers entered the summer school they were selected into groups of two. Each two teachers were assigned some farming community in the vicinity of the college. The problem of each group was to conduct an evening class with adult farmers in this community under the direction of the teacher trainers at the college. Classes were organized in 18 different communities. In each community six evening class meetings were held. A total of 729 different farmers were enrolled in these evening classes.

The subjects taught in most cases were the fertilizing of cotton and corn and the growing of cover crops for the improvement of the soil. The problem of top-dressing of corn and cotton with nitrogen fertilizer was given the most attention. This was the time of year for doing this sort of work on the farms in that section, hence it was possible to bring to those farmers in the evening classes the experimental data needed to make a decision on this matter and help the farmers to secure and apply the fertilizer if they chose to do so.

The teachers, however, first visited all of the farmers in their different com-munities and found their problems and practices they had been carrying on. This information was used as a basis for organizing the course of study to teach the different classes. Each teacher made from one to six visits to each farmer in his territory. The subject matter taught consisted almost entirely of experimental data that had been compiled by the division of education at Clemson College on the enterprises under consider-

A school similar to this was conducted at Clemson College the summer of 1927. Federal bulletin No. 129 gives a detailed report on this school.

## Group Conferences

DURING the past two years Tennessee has, to some degree, discontinued the individual visits to teachers by the itinerant teacher trainer, and has instead organized the group conferences. There are about 115 white teachers of agriculture in Tennessee, and these are divided on a geographic basis into about 15 groups. These groups meet on a regular school day at a central meeting place where the itinerant teacher trainer leads in a discussion of a statewide problem on which the teachers need up-to-date information. Last year this work was confined to a discussion of project records, and as an outgrowth of this, from which came suggestions by many of the teachers, the state records for project keeping were entirely revised.

### Mississippi Enters Into Agreement With Boy Scouts of America

F. J. HUBBARD. State Director

M ISSISSIPPI is the first state in the union to inaugurate scouting as an institution in rural communities. The state board for vocational education and the Boy Scouts of America have signed an agreement to cooperate in the promotion of rural scouting in the Smith-Hughes schools of the state.

The purposes of the cooperative plan which has been agreed upon by the offi-

cials of the two groups are:

1. To assist in the coordination of the work of rural scouting and that of the Smith-Hughes schools.

2. To aid the workers of both agencies in reaching that mutual understanding absolutely necessary to their intelligent and sympathetic cooperation.

3. To avoid duplication and over-lap-

ping of work.

4. To secure the combined and coordinated effort of both agencies so that the work of the one will supplement strengthen, and reinforce the work of the other to the end that the rural boy shall receive the broader, more compre-

hensive training for citizenship.

The counties of Warren, Neshoba,
Lincoln, Monroe, Itawamba, and Boliver are the first in Mississippi to take part in the new cooperative plan.

### Some Suggestions for a Father and Son Banquet

1. Purpose:

a. To bring the fathers to the school and in contact with your work.

b. To explain any phase of your work and show what has been accomplished. c. Especially to explain the plan and

purpose of the project. d. To establish comradeship and co-

operation between father and son. 2. Who to include:

a. Your boys and their fathers.

b. Perhaps other boys in the high school and their fathers.

c. Visitors: (1) Superintendent; (2) Members of board; (3) Pastors; (4) Farmers without sons.

3. Time to hold banquet:

a. As early in the year as possibleprobably soon after the community fair.

b. If desirable, two or more per year.

4. Place to hold banquet:

a. At school building-preferably in agricultural classroom.

5. Arrangement:

a. Tables: As compact as possibletables joined together rather than separated.

b. Seating: Father and son side by side or boys on one side of table and fathers on other side-certainly not fathers in one group and boys in an-

6. Program:

a. Have a definite objective and organize program around it.

b. Have fathers and sons represented on program.

c. Have the key speech first, or make sure that the object of the program is made clear at the start.

d. Have a few impromptu talks for their educational value.

e. Have music, directed by the music

f. Use a victrola if necessary, but have music.

7. Financing the banquet:

a. Materials donated by the families of the boys

b. Small charge to cover what must be bought.

8. A few don'ts:

a. Don't make folks listen to a number of talks before they get something to eat.

b. Don't expect the fathers to warm up to your program in a cold room.

c. Don't make your program too long. d. Don't have impromptu talks before the regular program.

e. Don't miss the opportunity to get your work before public.—Rural Life Letter, Pennsylvania State College.

### The Georgia Group

DOWN in Georgia they have a vocational teachers' association which includes all of the vocational teachers in the state. For several years this group has met at a vocational breakfast during the meeting of the Georgia State Teachers' Association, at which time they have some outstanding speaker address them on vocational education. This speaker has also been given a place on the main program of the State Teachers' Association.

In addition to belonging to this asso ciation the vocational agriculture teachers have district associations which meet quarterly for the purpose of discussing problems relating to their immediate needs. Each district is organized with a president, vice-president and secretary

for officers.

### How Farm Data Are Used In Our Agricultural Classes

E. C. STILWELL

Agricultural Teacher, Freehold High School, New Jersey

ONE of the surprising facts the teacher of agriculture learns is how little our farm boys are familiar with the details of the various local farm enterprises and practices. This is because the boy's parents have not taken the trouble to explain why the farm work is done a certain way, or the boys have not been allowed to do the various operations. While the home project takes care of some of this apprenticeship training, there is needed some device to supplement this type of instruc-

To assist in doing this, what we call the farm studies survey is used as a part of the course of study in the Freehold high school agricultural department. This consists of having each pupil select two or three farms in addition to the home farm for intensive study. At stated intervals the pupils observe closely what is going on in the fields and about the farm, and also interview the farmers by having each answer certain questions prepared in advance. The answers to these questions are brought together on a certain date and all the data correlated. Thus, a composite experience of many local farmers is obtained and, what is more, the ability of the pupils to compare, analyze and draw correct conclusions is developed. They are led to see just what factors make for the success or failure of each enterprise that contributes to the income of the farm business.

### Record Systems for Local Departments of Vocational Agriculture

I NTEREST in systematic records for instructors in vocational agriculture is being manifested in many sections of the country. The following article from the September Vocational Messenger of Colorado reports a plan described at the Colorado state conference.

'Irving Shaefer of Montrose led the discussion on Records and Record Keeping at the state conference. He described his own plan of record keeping, which, with other suggestions, is in-cluded. A four-drawer steel filing case should be available for every teacher of

vocational agriculture.

"The top drawer should include letter folders, preliminary project reports, final project reports, preliminary parttime reports, final part-time reports, community service reports, monthly reports, annual reports, plans and courses of study, follow-up reports, list of reference books, list of bulletins indexed in file, list of laboratory equipment owned by the school, list of farm shop equipment owned by the school.

"The second drawer should include a little folder for each pupil, to contain a complete record of the pupil and his home farm. This record should include a list of the skills possessed by the pupil and those he should have. There should also be folders for farm surveys, lesson plans, project record books, and a place for monthly records of class, shop and project work. Space should also be provided for permanent record cards of former pupils.

"The third drawer should include reference material, clippings, pictures, drawings and blue prints for animal husbandry, crops, farm mechanics, and

other subjects taught.

"The fourth drawer should include space for catalogs of supply houses, seed dealers, livestock breeders, nurserymen, etc., and state and federal bulletins.

The importance of the permanent record was also emphasized by Mr. W. T. Spanton. In order that the work in vocational education may function to the greatest benefit of all concerned, it. is necessary that a record of students be kept to point the way toward more efficient service in the future.'

#### Organized Effort

THE Vocational Agriculture Teachers' Association of Louisiana is young but does not allow its youth to prevent it doing things. It has to its credit, the raising of the funds needed to send a judging team to the Kansas City Royal; the lending of financial support to the legislative efforts of representatives interested in vocational education and is now actively sponsoring the Future Pelican Farmers as a state organization of vocational agriculture students.

This group is helping to entertain the American Vocational Association convention at New Orleans next December:

### State Supervisors Marry

A marriage of more than unusual interest was that of John F. Williams, agricultural supervisor for Florida, to the home economics supervisor of that state. The marriage took place in December.

# Recent Publications

Vocational Education in Agriculture 1917-1927. Federal Board for Vocational Education. Bulletin 134. 40 pp. 1928.

THIS bulletin prepared by Dr. C. H. Lane and A. P. Williams gives a condensed account of the progress of vocational education in agriculture. A person just entering the field will find this discussion particularly valuable; teacher trainees should surely read it. Those who read Federal Board bulletins will find tamiliar sentences. Such paragraphs as those on the advantages of combining general and vocational education, the vocational guidance viewpoint, supervised practice and the differences characteristic of part time and evening school groups, are of interest to all.

Gardner, V. R.; Bradford, F. C.; and Hooker, H. D. Orcharding. New York. McGraw Hill Book Company. 1927. 311 pp. \$3.

THIS textbook for beginners of college grade is a presentation of foundation principles. The authors point out the need of understanding principles as compared with knowledge of practices. The principles which have general application stand out clearly. Plant physiology, fertilization, growing and fruiting habits, sites, propagation, pruning

enemies and marketing give us an idea of the content; the organization logical. The presentation is careful and clear. This is a desirable reference book for the agricultural library.

Stone, A. A. Farm Machinery. New York. John Wiley and Sons. 1928, 460° pp. \$3.

A MUCH needed text for the teaching of farm machinery. Like other books in the series it is organized on the job basis. Type machines are selected for treatment. After the treatment of each machine is a series of laboratory studies and jobs. In addition to construction and parts such phases as adjustment, lubrication, repair, field troubles and operation are treated.

Filley, H. C. Cooperation in Agriculture. New York. John Wiley and Sons. 468 pp. \$4.

THIS new volume by Professor Filley of the University of Nebraska is highly desirable as a reference book for high school students and for the personal use of instructors in vocational agriculture. Like the recent work of McKay and Lane, which deals with the same subject, it contains a large amount of concrete, practical, readable material regarding American cooperatives on which general principles are based. It is

particularly usable in the Middle West because it does not slight the forms of cooperation that have developed there as do many books on this subject.

MORT, P. R. The Individual Pupil.' New York, American Book Company, 1928, 376 pp.

THERE are portions of this book which are of value to the teacher of agriculture who is interested in individual instruction. The viewpoint of the administrator predominates. The author shows by example how individual differences in a class can be determined, how they can be graphically shown and how prescribed for. The discussion of records is suggestive. There is a discussion of the plans for individual instruction such as the Winnetka and Dalton plans and a list of individual instruction materials. The selected bibliographies are good.

LUNDQUIST, G. A., and CARVER, T. N. Principles of Rural Sociology. Boston. Ginn and Company, 1927. 479 pp. \$2.84.

A N introduction to the study of rural problems in the United States, designed as a college text. Teachers of agriculture will find it an excellent reference book. It is clearly written. The authors indicate a knowledge of the rural viewpoint and of the research studies which are pertinent.

# What Others Think Of Us

WE believe that education in general pays good returns on the investment. There is no question but what education, even to the extent of specialization for the professions, pays for itself. These statements hold equally true for vocational education. Experience in this field has shown this to be a fact

The vocational program is important. The necessary cost of providing for the equipment and for courses for this training is just as properly a charge against the school funds of the district as any other course in education."—E. C. Griffen, newly inducted State Superintendent of Public Instruction, South Dakota.

THE pressure for the acquisition in infancy and adolescence of specific gain-making competences and talents is not a sign of educational progress; it is a sign of a return to the dark ages, the more dismal and dolorous because so unconscious and so usually accompanied by those shouts of triumph with which the barbarian uniformly celebrates his slayings of those things that he destroys because he does not appreciate or understand."—Nicholas Murray Butler, President of Columbia University, New York City, in his annual report for 1927.

V OCATIONAL education is, therefore, not a thing apart from the public school system—it is an integral part of its program. Its effectiveness is not a matter of guesswork. Certainly a program which taps new sources of information in the solution of our complex social and economic problems and in the conservation of natural and human resources is as important as any

other phase of public education. The splendid results of college vocational work in the fields of medicine, engineering, law, and others, are being duplicated on the public school levels in the courses and activities now being carried on for the 90 percent who do not enter the professions and who never go to college."—Miss Agnes Samuelson, State Superintendent of Public Instruction, Larga.

WE ARE all of us familiar with the state agricultural colleges and with the county agents. Less well known but just as important are the men who are teaching vocational agriculture in the high schools. In Iowa there are 106 of these vocational agricultural teachers and they are reaching 3,000 boys a year. This is several times as many boys as are taught agriculture by the college at

Ames. I have met a number of these teachers of vocational agriculture and have been greatly pleased with their attitude on farm problems. . . I am told some of them have already doubled the acreage of clover and alfalfa in their communities because of the way in which they have been able to reach the fathers thru the boys.

"I am beginning to think that the high special agricultural teacher is able to do

"I am beginning to think that the high school agricultural teacher is able to do, a kind of work which no one has ever been able to do before. In some ways it seems like the same old stuff, but actually he is getting in closer touch with the farming in his community than most of the rest of us. I am expecting the boys who have had high school training in vocational agriculture to help a lot in making Iowa a finer state to live in."—
H. A. Wallace in Wallaces' Farmer, Des Moines, Iowa.

# ARE YOU GETTING THE PAPER? We have discovered some instances

we have discovered some instances where persons have failed to receive certain issues of this magazine. We try to avoid this. When we do not succeed, we hope you will remind us. Another copy will be sent.

State supervisors would do us a service to determine for us whether the teachers of their states are receiving the publication regularly.

The magazine is a professional undertaking in which all members of the profession should participate. We hope that every subscriber will be alert, not only to demand good service for himself, but to see that the other subscribers to his magazine get equally satisfactory treatment. WITH thousands of farm boys thru-out the country working and playing together, we believe that the organization of 'Future Farmers of America' and the accompanying state and local sub-divisions, will develop better boys, citizens, and farmers, and make farming more attractive and profitable. The young fellows who learn the value of organization while yet in their teens and who become accustomed to the satisfactions of rural comradeship and teamwork-they will 'carry on' in the same way when they become men and will thus be far better able to promote 'Better Farming, Better Business, Better Living' than their fathers have ever done, or can ever do without such co-operative effort." — The Progressive Farmer, Birmingham, Alabama.

